



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,495	12/12/2005	Claus-Markus Pfeffer	502901-355PUS	4548
27799 7590 04/07/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176				
EXAMINER				
LAUGHLIN, NATHAN L				
ART UNIT		PAPER NUMBER		
2123				
MAIL DATE		DELIVERY MODE		
04/07/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,495

Applicant(s)

PFEFFER, CLAUD-MARKUS

Examiner

NATHAN LAUGHLIN

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-18 and 21-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-7,9-18 and 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date 1-22-09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1,3-7, 9-18, 21-28, 30-38 are presented for consideration.

Claims 2, 8, 19-20, and 29 have been cancelled.

Claims 1,3-7, 9-18, 21-28, 30-38 are rejected below.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1-22-09 has been entered.

Claim Objections

Claims 34 and 37 are objected to because of the following informalities: both claims seem to be missing a period at the end of the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 9-18, 21-28, 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurihara et al. (US 6,697,695) in view of Chen et al. (US 2005/0164684 A1) and further in view of Kitagawa et al. (US 5,224,047). Kurihara discloses,

1. A fault message system comprising a plurality of spatially distributed production units (Fig. 13 and 17, element 60; Col. 8, lines 61-67), each production unit comprising means for generating and indicating fault signals (Fig. 17; Col. 3, line 1), wherein two or more of said production units are arranged to form at least one group (Fig. 22), a fault alarm box configured for receiving and forwarding fault messages (Col. 20, lines 20-27; Fig. 14), a process computer in communication with the fault alarm box (Fig. 14, element 90; Col. 12, lines 43-45; Fig. 15; warning display is connected with fault alarm box or warning function in server and the fault alarm box is connected with a process computer in order to process the data), and at least one stationary data receiving unit in communication with the fault alarm box (fig. 1, element 40, Fig. 15; warning display is connected with fault alarm box or warning function in server and the fault alarm box is

connected with a process computer in order to process the data); wherein a particular one of the at least one group is associated with the at least one data receiving unit (Fig. 22).

3. The fault message system as claimed in claim 1, wherein the fault alarm box is connected to the process computer via a network connection (Fig. 14).

4. The fault message system as claimed in claim 3, wherein the network connection is a LAN connection (Fig. 14).

5. The fault message system as claimed in claim 3, wherein the process computer is connected to other computers via a second network (Fig. 22). 6. The fault message system as claimed in claim 1, wherein the fault alarm box has a data editing unit (Col. 20, line 41 to Col. 21, line 18).

7. A method for outputting fault messages from a number of spatially distributed production units forming at least one group of production units (Fig. 22), the method comprising; generating a method fault signal by at least one of said production units (Col. 3, line 1), supplying the method fault signal to a stationary data receiving unit (Fig. 1, element 40), forwarding said method fault signal to a fault alarm box (Fig. 22, server 314), supplying a fault message from said fault alarm box to one or more data receiving devices configured for receiving and indicating fault messages (Fig. 1, element 40), and

supplying the fault message from said fault alarm box to a process computer (Col. 4, lines 43-47).

9. The method fault message system as claimed in claim 7, wherein characterized in that the fault signals of the production units are edited in the fault alarm box for conversion into fault messages (Col. 20, lines 41 to Col. 21, line 18).

10. The method as claimed in claim 9, wherein characterized in that a fault signal is only converted into a fault message in the fault alarm box when it is present for a predetermined period of time (Col. 16, line 49 to Col. 17, line 12). 11. The method as claimed in claim 9, wherein a fault signal is only converted into a fault message in the fault alarm box when a particular period of time has elapsed since the last presence of the previous fault signal (Col. 16, line 49 to Col. 17, line 12).

12. The method as claimed in claims 7, wherein the fault message is supplied to the process computer at a different time than the fault message is supplied to said data receiving device (Col. 19, lines 61-64; Col. 20, lines 28-33).

13. A fault message system comprising:
a plurality of production units, wherein each production unit is associated with a transmitting unit configured for transmitting fault signals relating to said production unit (fig. 22, element 310); at least one group comprising a number of said production units

(Fig. 22, elements 311); wherein a particular one the at least one group is associated with the at least one stationary data receiving unit which is configured for receiving fault signals transmitted by the transmitting unit associated with any production unit in said group (Fig. 22, element 316); a fault alarm in communication with said data receiving unit (fig. 22, element 314; Fig. 14, elements 223,224); and a process computer in communication with said fault alarm (Fig. 22, either server 314 or monitor 312).

14. The apparatus of claim 13, further comprising a receiving device for receiving a fault message from said fault alarm (Fig. 15, 17, 22).17. The apparatus of claim 13, comprising a plurality of groups (Fig. 22).

18. The apparatus of claim 13, wherein each group is comprised of production units of an individual production line (Fig. 22).

21. The apparatus of claim 13, wherein said production units are spatially separated (Fig. 22).

23. The apparatus of claim 13, wherein said process computer is adapted to document and evaluate fault messages from said fault alarm (Fig. 14).

24. The apparatus of claim 13, wherein said process computer is connected to said fault alarm via a network connection (Fig. 20).

25. The apparatus of claim 13, wherein said fault alarm has a data editing means for determining when to send a fault message from said fault alarm (Col. 20, line 41 to Col. 21, line 18).

26. The apparatus of claim 13, wherein said fault alarm is adapted to send said fault message only when a fault signal received by said data receiving unit is present for a first predetermined period of time (Col. 16, line 49 to Col. 17, line 12). 27. The apparatus of claim 26, wherein said fault alarm is adapted to send a second fault message only when a second predetermined period of time has passed following the end of the fault signal present for the first predetermined period of time (Col. 16, line 49 to Col. 17, line 12).

28. A method for outputting fault messages comprising:
generating a first fault signal at a production unit of a group of production units (Fig. 22; Col. 3, line 1); sending said first fault signal to a stationary data receiving unit associated with said group (Fig. 22, monitor 312); transmitting said first fault signal from said data receiving unit to a fault alarm (Fig. 22, server 314); determining whether to send a fault message from said fault alarm (Fig. 14, element 223); and sending a first fault message generated by said fault alarm to at least one data receiving device or process computer (Fig. 22, display).

30. The method of claim 28 further comprising sending said first fault message only when said first fault signal is present in the fault alarm for a predetermined period of time(Col. 16, line 49 to Col. 17, line 12).

31. The method of claim 28 further comprising generating a rising signal while said first fault signal is present in said fault alarm, and sending said first fault message only when said rising signal exceeds a predetermined threshold value(Col. 16, line 49 to Col. 17, line 12).

32. The method of claim 28 further comprising sending a second fault message from said fault alarm in response to a second fault signal received after sending said first fault message, wherein said second fault message is sent only if a predetermined period of time has elapsed following the end of said first fault signal (Col. 16, line 49 to Col. 17, line 12).

33. The method of claim 28, wherein said first fault message is sent to a data receiving unit and a process computer at different time intervals (Col. 4, lines 43-47).

34. (New) The system of claim 1, wherein the fault alarm box is connected to a plurality of stationary data receiving units (fig. 11, col. 8 lines 59-67).

35. (New) The system of claim 1, wherein the fault alarm box determines whether a fault signal should result in the issuance of a fault message (col. 19 lines 57-60).

36. (New) The system of claim 1, wherein each data receiving unit is connected to more than one of the plurality of production units (fig. 22).

37. (New) The system of claim 13, wherein the fault alarm is connected to a plurality of stationary data receiving units (fig. 11, col. 8 lines 59-67).

38. (New) The system of claim 13, wherein each data receiving unit is wirelessly connected to more than one of the plurality of production units (fig. 22).

Kurihara discloses most of the limitations of claims 1,7, 13-14, 28 above but fails to disclose some limitations of claims 1,7, 13, 15-16, 22 and 28. However, Chen discloses such limitations as follows:

As for claims 1,7, 13, 15-16, 22, 36, and 38 Chen discloses, As for claims 1,7, 13 and 28, wherein each production unit is associated with a transmitting unit for the wireless transmission of fault signals and the at least one data receiving unit being configured for wirelessly receiving and indicating the fault signals (Abstract; [0078];[0086];[0023];[0073]).

15. The apparatus of claim 14, wherein the receiving device is a mobile telephone ([0104]). Chen shows that it is well known to wirelessly transmit fault data.

16. The apparatus of claim 14, wherein said fault message is sent in the form of an SMS [0104].

22. The apparatus of claim 13, wherein said fault signals are transmitted via wireless transmission ([0078];[0086]).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of Kurihara with Chert because it would provide an improved system by providing wireless enhanced support within a process control environment (Chen, [0002]).

Kurihara and Chert disclose most of the limitations of claims 1, 7, 13 and 28 above but fails to specifically disclose said means for indicating fault signals is a lamp or visually displaying the fault signal with a lamp in the data receiving unit or the at least one data receiving unit comprising a lamp. However, Kitagawa discloses the use of a lamp for indicating faults signals (Col. 1, lines 39-41). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of Kurihara and Chert with Kitagawa because it would provide an improved

system by using a lamp for easily identifying abnormalities (Kitagawa, Col. 1, lines 35-41).

Response to Arguments

Applicant's arguments filed 1-22-09 have been fully considered but they are not persuasive.

Applicant argues that the data receiving unit in Kurihara is not stationary, however, examiner disagrees; the monitor/display terminals are stationary devices that receive data from the fault alarm box (fig. 1, col. 8 lines 47-67). It is very well known that terminals (i.e workstations) are stationary. Since applicant does not explicitly use or define the term stationary examiner is giving it its plain definition, in which terminals would be interpreted as such. Applicant alleges that Examiner is interpretation of the 'fault box' as the monitor; however, this is not correct, the interpretation is that the server is the 'fault box'. Therefore, the arguments made on these grounds are moot. Applicant also argues that the Kurihara's lamp is not the same as the recited lamp. However, it can be seen in this action, as well as the last, that Kurihara was not cited for teaching a lamp, rather Kitagawa teaches this. Examiner does note that the arguments with regards to the "limited visual field" are not in the claim anyhow.

As to claims that Chen teaches a handheld controller, examiner notes that the teaching of Chen was to show that it is well known in the art to use wireless transmissions for fault system. That is, it would have been obvious to one of ordinary skill in the art at the time the invention was created to include wireless transmissions (as

taught by Chen) between the systems elements of Kurihara, wherein at least some of the system elements are stationary. Chen also teaches that fault message can be sent to other devices such as wireless device (i.e. cellular phone, [0078];[0086];[0023];[0073] [0104]). Examiner also notes since it has clearly been established that wireless transmission can occur between stationary units other units (stationary or mobile), it can be seen that Kitagawa's lamp can be combined with a stationary unit for displaying fault status and is not necessarily combined with a mobile device. Again, Applicant argues that the lamp can be seen from a 'great distance' however, this is not in the claim.

Therefore, Kurihara, Chen, and Kitagawa do teach all the limitations of claimed invention and a prima facie case has been established. Furthermore, the combination also teaches newly add claims 34-38.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN LAUGHLIN whose telephone number is (571)270-1042. The examiner can normally be reached on M - F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nate Laughlin/
Examiner, Art Unit 2123

/Kideest Bahta/
Primary Examiner, Art Unit 2123